

**REVISION # 1**  
**DRAFT STAFF REPORT P. 3-6**

In 1994, CDFG staff collected (via electroshocking surveys) one rainbow trout downstream of the DCWWTP on July 1, and two rainbow trout upstream of the DCWWTP on September 6. The origin of these fish (i.e., whether native or introduced) is unknown. The three adult rainbow trout that were captured in Deer Creek by CDFG Fishery Biologist S. Lehr in his 1994 fish survey are believed to have originated from a landowner's stocking of rainbow trout into a small, unnamed spring-fed creek that flows through the landowner's property and into Deer Creek, just upstream of the limestone quarry that exists approximately one-half mile upstream of the DCWWTP (S. Lehr and M. Mainz, CDFG, pers. comm., November 5, 2002). These three trout are not believed to have been individuals from a natural, self-sustaining population of rainbow trout supported by Deer Creek.

Fish surveys conducted (both upstream and downstream of the DCWWTP) in 1993 (JSA), 1995 (CDFG), 1996 (SWRI), and 1999 (Cosumnes River Nature Conservancy/U.C. Davis) did not find any trout, either upstream or downstream of the DCWWTP. However, the other fish species found during the 1994 CDFG survey were consistent with those found in the JSA (1993), CDFG (1995), SWRI (1996), and Nature Conservancy/U.C. Davis (1999) surveys.

Finally, the sampling near the confluence with the Cosumnes River by the Cosumnes River Nature Conservancy/U.C. Davis in 1999 documented that six additional fish species make use of Deer Creek in this lower reach. None of these six species were found by the Conservancy/U.C. Davis investigators at or upstream of Latrobe Road, nor were any of these six species documented to occur at or upstream of Latrobe Road by any of the other fish surveys conducted by JSA (1993), CDFG (1994, 95), or SWRI (1996).

The Nature Conservancy/U.C. Davis, which conducted the 1999 lower reach fish survey cited above, also conducted Deer Creek fish surveys in 2000, 2001, and 2002. Results from these surveys were not available when the initial draft of this Staff Report was prepared and, therefore, are presented here as part of subsequent revisions to this report.

Deer Creek at Country Club Rd. (Near Highway 50) – several miles upstream of the DCWWTP:

8/9/00- 21 California roach; 2 bluegill; 5 largemouth bass

7/26/02-10 California roach; 8 bluegill; 25 green sunfish

Deer Creek at Latrobe Rd – approximately 4 miles downstream of the DCWWTP:

8/9/00- 30 Sacramento pikeminnow; 3 green sunfish; 9 Sacramento sucker

8/28/01- 164 S. pikeminnow; 15 green sunfish; 2 S. suckers; 1 prickly sculpin; 1 mosquitofish

7/2/02- Approx. 50 S. pikeminnow; approx. 10 mosquitofish; 2 prickly sculpin

Deer creek at the confluence with the Cosumnes River – about 35 miles downstream of the DCWWTP:

8/22/00- 14 S. pikeminnow; 1 prickly sculpin

7/5/01- 1 largemouth bass; note: almost no water, just a few minor pools.

Approx. 6/15/02- dry; no water

Cosumnes River just below confluence with Deer Creek:

8/22/00- 82 largemouth bass; 35 suckers; 5 redeye bass; 8 bluegill; 36 pikeminnow

7/5/01- 4 spotted bass; 5 pikeminnow

Approx 6/15/02- dry; no water

These additional Deer Creek fish surveys, conducted by The Nature Conservancy/U.C. Davis during the period 2000-2002, bring the total number of fish surveys conducted on Deer Creek between 1993 and 2002 to eight (8) including four (4) lower reach surveys. The 2000-2002 surveys documented the same fish species in Deer Creek identified in the Draft Staff Report, found no rainbow trout at any site (either above or below the DCWWTP), and did not document any new species for the creek that would require modification of the propose temperature objectives.

Based on available fish data discussed above, current effluent discharges from the DCWWTP do not cause the number of fish species present, or their respective relative abundances to be lesser downstream compared to upstream of the DCWWTP. The same can be said for the benthic macroinvertebrate communities present upstream and downstream of the DCWWTP.

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**3.2.1.1.3.1 WARM**

Five fish and two BMI surveys conducted on Deer Creek between 1993 and 2000 were used to characterize Deer Creek's existing aquatic ecology. The SWRI (1996) study provides a third BMI survey, in addition to the CDFG (1998) and BAS (2001) surveys summarized above. The SWRI (1996) survey was not included in the detailed BMI discussions above because it was conducted prior to the completion of significant plant upgrades.

The two ~~benthic macroinvertebrate~~ BMI surveys and five fish surveys performed all or, at a minimum, a portion of their sampling in the vicinity of the DCWWTP. The results from these surveys have demonstrated that the creek's current resident aquatic communities, both upstream and downstream of the DCWWTP, are comprised of healthy, self-sustaining populations of warmwater fish and macroinvertebrates. Fish populations were determined to be healthy based on the presence of multiple age classes, adult sizes consistent with expected sizes for fish in a water body with Deer Creek's characteristics, and a low incidence of observable external lesions and parasites.

### *Hydrology*

Available site-specific hydrologic data and observations indicate that Deer Creek typically loses surface flow continuity (i.e., reaches of creek such as the reach in the vicinity of Scott Road lose all above-ground flow, with possibly only subsurface flows occurring) in ~~late spring/early to mid~~-summer ([Appendix G](#)). Any successful emigration of anadromous fish would have to occur before surface flow continuity is lost. The flow augmentation that results from DCWWTP effluent discharges would generally increase the period of surface flow continuity in the spring/early summer, thereby reducing the risk that surface flow continuity would be lost prior to water temperature reaching levels that would result in young anadromous fish emigration from the system. Effluent discharges from the DCWWTP would not contribute to “trapping” anadromous salmonids that may be opportunistically produced in Deer Creek; rather, discharges would contribute to preventing such occurrences. For additional discussion on the Deer Creek watershed and Deer Creek’s hydrology, see Section 4.7.2.2.

#### **3.2.2 Past Beneficial Uses**

Based on available information and best professional judgment, the beneficial uses of Deer Creek are not believed to have changed since the DCWWTP began discharging effluent to the creek. Rather, only subtle differences in the “degree” to which various uses are supported are believed to have changed.

The DCWWTP began discharging treated municipal effluent to the creek in 1974. No detailed documentation of the beneficial uses (including the presence of warm and cold water aquatic species) or the physical, chemical, or biological characteristics of Deer Creek is available for any time prior to 1974. For example, the Environmental Impact Statement prepared for the Deer Creek Basin Water Reclamation Project of the El Dorado Irrigation District (EID 1972) did not provide information on specific fish species or aquatic ecosystems present in Deer Creek. Rather, it briefly stated that Deer Creek is an intermittent stream depending on natural runoff from the surrounding low-elevation foothills for its source water. It further stated that the intermittent, seasonal instream flow throughout much of the creek’s length limits the wildlife and aquatic life uses that the creek supports. ~~P~~Consequently, ~~p~~ast beneficial uses are inferred based on best professional judgment regarding the hydrology and water quality of Deer Creek prior to 1974.

The Deer Creek watershed has been significantly altered due to urban development, ranching, and other human activities, relative to natural, pre-settlement conditions. Deer Creek hydrology and water temperatures in the 1960s, and early 1970s were already impacted by human activities, and have continued to be impacted by such human activities in recent decades.

#### 4.7.2.2 Hydrographic Unit Environmental Characteristics Considerations

Adoption of the proposed set of site-specific temperature objectives would not adversely affect the hydrology of Deer Creek or downstream water bodies, relative to existing conditions. Nevertheless, a further characterization of the Deer Creek watershed is provided below for context.

Deer Creek is a small, ephemeral creek draining the lower woodlands of the western Sierra Nevada foothills in El Dorado and Sacramento Counties. Deer Creek is the primary watercourse of its watershed, which covers approximately 87 square miles (56,000 acres) north of Sloughouse. The watershed draining to Deer Creek is very narrow to the south of Sloughouse, with most of the area to the southeast draining to the Cosumnes River and most of the area to the southwest of Sloughouse draining to the lower Sacramento River watershed (Figure X). This section provides a characterization of the land uses, geology, hydrology, and other key characteristics of the Deer Creek watershed.

##### Land Uses

The Deer Creek basin was an undeveloped, rural area until about 1959. At this time, the Cameron Park subdivision was started (EID 1972). The unincorporated communities of Cameron Park and El Dorado Hills have undergone planned and approved growth in the past four decades, resulting in current populations estimated at 14,549 and 18,016, respectively (Shingle Springs/Cameron Park Chamber of Commerce). In a letter from CDFG Regional Manager L. Ryan Broddrick to Mr. Edward Anton, Chief of Division of Water Rights at the SWRCB dated December 23, 1994, CDFG characterized the Deer Creek watershed as follows.

*“The upper portion of the watershed has experienced modest residential and light industrial development. The area of the watershed near the WWTP has little or no development. The area upstream and near Latrobe Road has been developed with small ranchettes. The area downstream of Latrobe Road in Sacramento County is primarily agricultural.”*

Current land uses are similar to that described by CDFG in its 1994 letter cited above, with some additional business and commercial development having occurred recently in the El Dorado Hills area. Current land uses along Deer Creek include natural, undeveloped woodlands and shrub communities, residential, urban, and agriculture (Figure X). The District's DCWWTP is the only municipal wastewater treatment plant discharging to Deer Creek.

##### Soils and Geology

The Deer Creek watershed lies within the west-central portion of a northwest-trending belt of diverse metamorphic rocks that underlie the western slope of the Sierra Nevada foothills. This region is part of the Sierra Nevada geomorphic province that is typically underlain by Mesozoic Era metavolcanic and metasedimentary bedrock associated with the Bear Mountain Ophiolite Complex. Alluvial deposits are present within the Deer Creek channel and range from discontinuous to locally continuous mixtures of unconsolidated cobbles, gravel, sand, and silt (ESA 1998).

Regarding water infiltration rates, the Deer Creek watershed is characterized by three basic types of soils having distinctly different rates of water infiltration (Figure Y). The upper-most portion of the watershed is characterized by underlying soils having a relatively high percolation or water infiltration rate compared to soils throughout most of the upper watershed and soils of the greater region. Downstream of Highway 50, the creek channel traverses areas characterized by underlying soils and geology (e.g., bedrock and rock outcroppings) that have a very slow water infiltration rate. This results in perennial flows in Deer Creek upstream of the DCWWTP and for a number of miles downstream of the DCWWTP. However, the soils underlying the Deer Creek channel change substantially in the Sloughouse area and in the reach from Sloughouse to the confluence with the Cosumnes River. The lower foothills transition into the valley floor just upstream of the Sloughouse area. In this lower foothill-valley floor transition area near Sloughouse exists a rather extensive area of soils that have a relatively high percolation or water infiltration rate compared to soils throughout the rest of the watershed and the region, and similar to those of the upper-most portion of the watershed. In addition, a band of soils characterized by an infiltration rate that is intermediate between that of the low rate characterizing most of the watershed and the higher infiltration rate of the Sloughouse deposits underlies Deer Creek from just north of Highway 16 to the creek's confluence with the Cosumnes River (Figure Y).

## **Hydrology**

Deer Creek's headwaters originate just north of Cameron Park Lake at an elevation of approximately 1,300 to 1,400 ft above mean sea level (msl), and its terminal drainage during the high-flow period of winter and spring is into the Cosumnes River, just upstream of the Highway 99 crossing, in Sacramento County (Figure X). During the low-flow, non-precipitation portion of the year (e.g., June through October), Deer Creek becomes intermittent downstream of Latrobe Road and thus does not have contiguous, flowing surface water continuity throughout its length. Consequently, Deer Creek typically does not discharge into the Cosumnes River during this period of the year. This period of intermittent flow and discontinuity with the Cosumnes River typically begins in late spring/early summer and lasts into November and often December (see Appendix G, Sloughouse flow data). Deer Creek was historically ephemeral, as shown by the historic U.S. Geological Survey flow data compiled for the Sloughouse gage (Appendix G).

Cameron Park Lake was built in the early 1950s. It is approximately 45 surface acres in size, with an average depth of about 7 ft and a maximum depth at the dam of

approximately 20 ft. The lake spills over a wooden dam at the lake outlet, providing much of the flow to the upper reaches of Deer Creek, below this dam. (L. McBride, General Manager of the Cameron Park Community Services District, pers. comm., November 8, 2002; December 5, 2002).

Natural flow into Cameron Park Lake generally stops between May 15 and June 1 (SWRCB 1995). Overflow and leakage from the dam at Cameron Park Lake, springs and tributary inflows, and urban runoff supply the creek's water downstream of the dam during the non-precipitation period of the year (SWRCB 1995). Summer base flows, upstream of the DCWWTP, have been documented in the range of 0.16-0.28 mgd (0.25-0.43 cfs) (SWRCB 1995). Unlike higher elevation creeks that receive perennial water supplies from snow pack, Deer Creek's small, low-elevation watershed does not hold snow pack.

Precipitation and runoff sustain and often dominate flows in Deer Creek during wet weather. During large storm events, Deer Creek flows can increase four orders of magnitude over their summer/fall low-flow levels (Appendix G).

Instream flows in Deer Creek's upper reaches are presently augmented, relative to what they were historically, due to urban runoff and discharges from the DCWWTP. All SWRCB-registered water rights for diversion from Deer Creek exist downstream of the DCWWTP site. Several small water rights (maximum application for direct diversion ranging from 0.0008-0.035 cfs) exist in the reach of the creek extending about 5 miles downstream of the DCWWTP. The primary water rights on the creek (i.e., those having higher permitted diversion rates for agricultural irrigation) exist between the Sloughouse area and the confluence with the Cosumnes River. These are both riparian and appropriative rights, many of which date back to the first half of the 1900s. Hence, instream flows during the non-precipitation period of the year in the upper reaches of the creek are somewhat higher than they were historically. Because the creek is ephemeral, because downstream diversions are making use of the additional water added to the system in upstream reaches, and because long-term flow records are not available for the creek at any location, it is difficult to determine how the seasonal flow regime in the lower reach of the creek has changed over time.

The soils underlying the Deer Creek channel south of Sloughouse (Figure Y) act as a "sponge" in the fall when initial rain events begin to increase Deer Creek flows in the upper watershed. Substantial amounts of precipitation and upstream flow are required to saturate the Deer Creek channel throughout its length and subsequently result in hydraulic continuity with the Cosumnes River. For example, the first substantial rain event of the fall of 2002, which occurred November 8-12, 2002, delivered 4.0 inches of rain as measured at the Sly Park Lake Gage (see CDEC website). This initial fall rain event of 4 inches resulted in a mean daily flow of approximately 38 cfs, and a peak flow of 150 cfs on November 8, 2002 as measured at the DCWWTP's R1 (upstream) gage. Nevertheless, this was not a sufficient amount of precipitation and resultant Deer Creek flow to cause Deer Creek to establish hydraulic continuity with the Cosumnes River. The creek never established flowing surface water at Wilton Road during or following

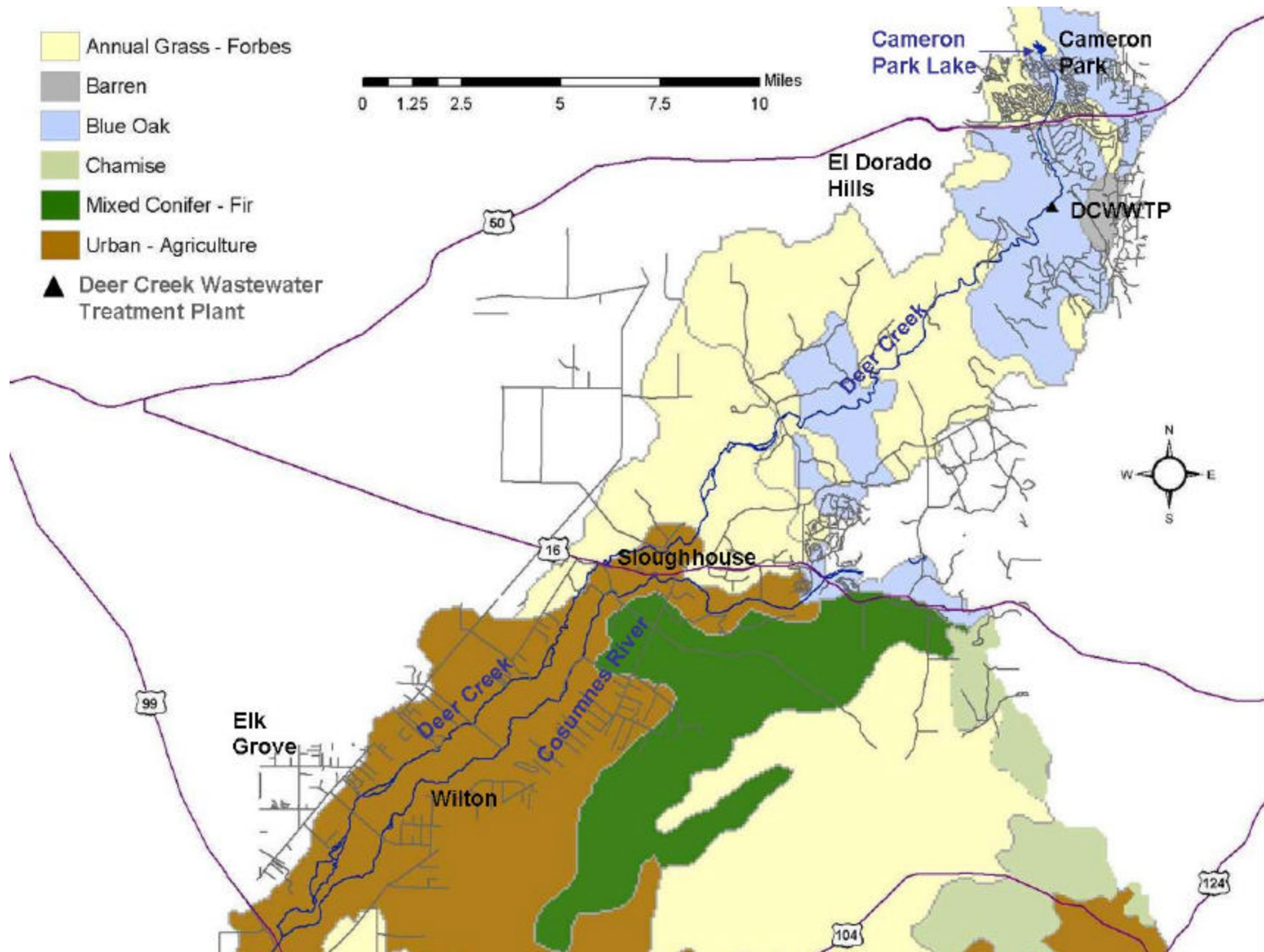
this initial storm event, which is located approximately 30 miles downstream of the DCWWTP. Conversely, this storm event did result in the Cosumnes River re-establishing hydraulic continuity with the Mokelumne River for a period of time during and following the precipitation event.

Based on available information, Deer Creek hydraulic continuity with the Cosumnes River is not re-established in the fall/winter period of the year until a substantial amount of precipitation has occurred, thereby saturating the creek channel's underlying soils to the south of Sloughouse, which are characterized by relatively high infiltration rates. The portion of the Deer Creek channel near the Wilton Road crossing is believed to be one of the last reaches of the creek to re-establish surface water flows during the fall/winter period when hydraulic continuity with the Cosumnes River becomes re-established, annually, due to precipitation and associated runoff.

The re-establishment of Deer Creek's surface-flow hydraulic continuity with the Cosumnes River was monitored weekly at four sites (Scott Rd, Kiefer Rd, Meiss Rd, and Wilton Rd) in the fall/winter of 2002. Approximately 4 inches of precipitation occurred in the Deer Creek watershed during the period November 7-12, 2002. Following this storm event, surface water flows returned to the Kiefer Rd site, which had previously been dry, and surface flows or standing water had existed previous to the rain event at Scott Rd and Meiss Rd. However, the Wilton Rd site never re-established surface flows (i.e., the creek bed remained dry) both during and following the 4-inch November rain event. In fact, the Wilton Rd reach of the creek had not re-gained surface water flow as of mid-December 2002. Wilton Road is located approximately 5.8 miles upstream of Deer Creek's confluence with the Cosumnes River, and is one of the last reaches of Deer Creek to re-gain hydraulic continuity based on field inspections of the creek conducted throughout the fall of 2002. This mid-November 2002 rain event caused the Cosumnes River to re-establish hydraulic continuity with the Mokelumne River for five days, during and immediately following the rain event, but then the river disconnected again. Because Deer Creek did not re-establish hydraulic continuity, there was little to no discharge from Deer Creek into the Cosumnes River during or immediately following this substantial November precipitation event. On December 16, 2002 at approximately 6:00 P.M. surface flow continuity was established in Deer Creek at the Wilton Road crossing. This was based on monitoring the Sacramento County automated staff gauge at the site. The surface flow continuity was confirmed by staff from RBI on December 17, 2002 at 9:30 A.M. Cumulative precipitation in the Deer Creek Watershed between October 1, 2002 and December 16, 2002 was 10.44 inches recorded at the Sly Park gage (upper watershed) and 5.2 inches at the Cosumnes River Eagles Nest Road gage (lower watershed).

In addition to the 2002 field investigations that documented the above, an interview was conducted with a fourth-generation rancher, Mr. Robert Mahon, regarding his historic observations of Deer Creek flows in the fall/early winter. Mr. Mahon's ranch is located about one mile upstream of the confluence of Deer Creek with the Cosumnes River. He stated that there is almost never water flowing in Deer Creek, in the reach on his property, during October and November when the fall-run chinook salmon spawning run

is occurring on the Cosumnes River. He stated that a lot of rain is required before this section of Deer Creek flows, which initially occurs in most years sometime in December. Mr. Mahon is 57 years old and has lived on this ranch his whole life (R. Mahon, pers. comm., December 12, 2002).



**Figure X.** Land uses within the Deer Creek watershed.

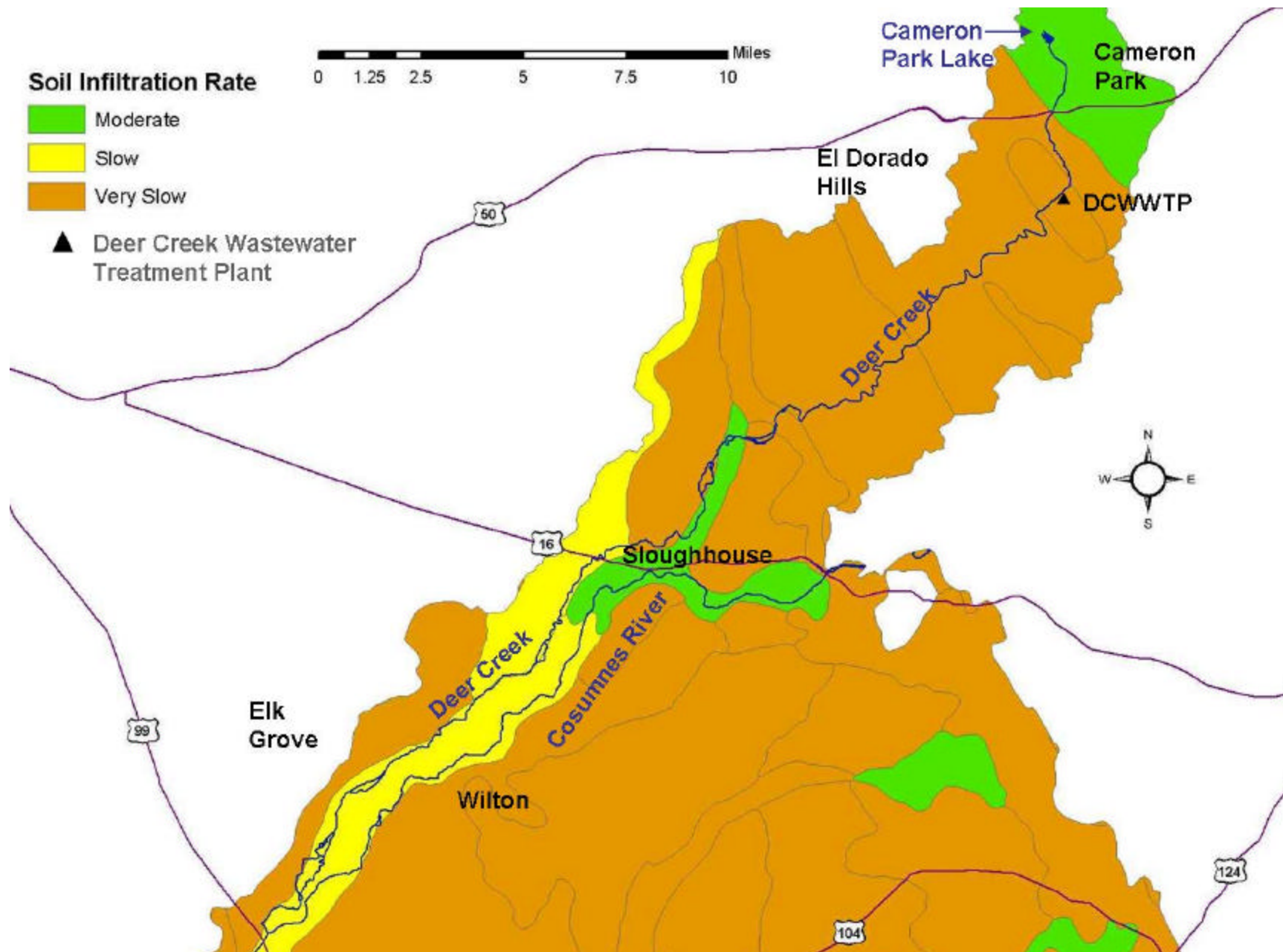


Figure Y. Soil types within the Deer Creek watershed.

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**Figure 7** and **Figure 8** compare the proposed daily high temperature objectives to the daily maximum temperatures calculated (via mass-balance equations) for the four discharge conditions defined above, under 1997-2000 ambient hydrology/weather conditions. These comparisons demonstrate that existing facilities and operations of DCWWTP currently facilitate compliance with the proposed daily high temperature objectives at the R2 location, and would be expected to continue to do so under all potential future discharge scenarios. Calculations show that daily high temperatures under the three DCWWTP discharge conditions evaluated (i.e., current discharge, permitted capacity, and potential buildout) would never exceed the applicable proposed daily maximum temperature objective. Conversely, the pre-discharge condition is shown to periodically exceed the proposed daily high objectives during the ~~\_winter, spring, and summer months periods~~. These results indicate that effluent discharges can have a moderating effect on Deer Creek's daily maximum temperatures during summer months~~these periods~~ of the year.

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The USFWS has regulatory jurisdiction over all species listed under the federal ESA other than anadromous salmonids, which fall under the jurisdiction of NMFS. U.S. EPA's approval of site-specific temperature objectives for Deer Creek would be a federal action subject to the requirements of ESA section 7, which requires federal agencies to ensure that their actions will not likely jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat. ~~Moreover, the proposed federal action, for which consultation with USFWS will be conducted by U.S. EPA, is approval of site-specific temperature objectives for Deer Creek.~~ Even in the event that a listed plant, amphibian, reptile, or other species for which USFWS has jurisdiction were to use the creek and/or its riparian corridor, U.S. EPA's action of approving the proposed site-specific water quality objectives for Deer Creek would not be likely to adversely affect the species. This is because the proposed amendment would not change current creek hydrology and would not allow a future change in the creek's seasonal temperature regime, relative to existing conditions, of sufficient magnitude to adversely affect plant, amphibian, reptile, or other species utilizing the creek or its riparian corridor.

## Revision # 7

### Staff Report p. 8-1 and 8-2

#### 8.1.1 Discharger Monitoring

##### 8.1.1.1 Water Quality Monitoring

The District operates the DCWWTP under Regional Board Order No. R5-2002-0210 (NPDES No. CA 0078662). This Order includes a Monitoring and Reporting Program, which requires the District to monitor Deer Creek temperature weekly at the R1 (upstream) and R2 (downstream) monitoring sites. This monitoring currently occurs and would continue as long as the District discharges treated municipal wastewater to Deer Creek. No additional program for collection of temperature data is necessary. However, upon final approval of the proposed site-specific temperature objectives by U.S. EPA, the NPDES permit for the DCWWTP should be re-opened by Regional Board staff and modified to include the adopted temperature objectives as receiving water temperature limitations. In addition, the NPDES permit's Monitoring and Reporting Program should be modified to require more frequent temperature monitoring, relative to the current NPDES permit, at the R2 (downstream) location.

The District will continue to monitor Deer Creek water temperature at the R1 and R2 monitoring stations defined in its DCWWTP NPDES Permit. In addition to the NPDES monitoring requirements, the following temporary monitoring of creek temperatures will be required of the District as a condition of the proposed site-specific temperature objective's adoption. *In situ* temperature probes shall be deployed in Deer Creek to monitor hourly creek temperatures at Latrobe Road, Scott Road, and Wilton Road during the months of September through December and again April through June, for a period of three years following adoption of the proposed temperature objectives. This monitoring is requested by Regional Board Basin Planning staff to provide additional data on Deer Creek's seasonal downstream temperature profile during the months specified. Findings shall be disclosed to Regional Board Basin Planning staff in an annual technical report. If there is no flow at the monitoring site during any period that monitoring is required, it shall be noted in the annual report.

##### 8.1.1.3 Flow Monitoring

The District will continue to monitor Deer Creek flow rate at the R1 monitoring station, as defined in its NPDES Permit for the DCWWTP. In addition to the NPDES monitoring requirements, the District will develop rating curves for the staff gages located on Deer Creek upstream of Scott Road and at Wilton Road, which are currently operated by Sacramento County for flood control purposes. The rating curve developed for each gage shall be capable of converting the staff gage reading into Deer Creek flow rate (cfs). The rating curves for both gages shall be developed within one year following adoption of the proposed temperature objectives. Following development of rating curves for these gages, the District shall, using the rating curves developed, estimate and document daily Deer Creek flow rates upstream of Scott Road and at the Wilton Road crossing for the periods September through December and again April through

June. This monitoring is requested by Regional Board Basin Planning staff to provide additional data on Deer Creek's seasonal downstream flow profile during the months specified. Findings shall be disclosed to Regional Board Basin Planning staff in an annual technical report. If there is no flow at the monitoring site during any period that monitoring is required, it shall be noted in the annual report.

#### **8.1.1.2 Biological Monitoring**

In addition to conducting water quality monitoring weekly (see above), the District ~~has agreed to shall~~ fund biological assessments of Deer Creek's BMI community (using CDFG's California Stream Bioassessment Protocol) twice/year (spring and fall) for two years (total of four surveys). The District has committed ~~to fund these surveys~~ and has already funded the first of four surveys, which was conducted by Bioassessment Services in the October 2000. Findings from this October 2000 BMI survey are discussed in this Draft Staff Report (see Section 3.2.1.1).

The District also shall monitor the hydrologic conditions that occur in Deer Creek and the Cosumnes River during the period October through April, annually using data collected from the Scott Road and Wilton Road automated gauging stations which are operated by the County of Sacramento following adoption of the proposed temperature objectives. In the event that hydrologic conditions conducive to potential opportunistic use of Deer Creek by anadromous salmonids occur, the District shall fund a fish survey to investigate whether anadromous fish made opportunistic use of Deer Creek. Conditions conducive to potential opportunistic anadromous fish use of Deer Creek are: 1) surface flow hydraulic continuity throughout Deer Creek, between Deer Creek and the Cosumnes River, and the Cosumnes River with the Mokelumne River during the period October 15 through December 31; or 2) daily flows at Michigan Bar on the Cosumnes River that rank in the top 25th percentile of flows at that site historically during one or more of the months January through April, with concurrent hydraulic continuity throughout Deer Creek and between Deer Creek with the Cosumnes River. Upon identifying either of the hydrologic conditions defined above, the District and its consultant shall meet with staff from the Regional Board, CDFG, and NMFS to cooperatively develop a study design that, when implemented timely, will collect data appropriate for assessing whether anadromous fish made opportunistic use of Deer Creek and, if so, the relative magnitude and geographic extent of such use.

The CDFG April 1998 BMI survey (CDFG 1998), coupled with a BMI survey conducted during the fall of 2000 (BAS 2001), will be used to characterize existing conditions. Subsequent BMI surveys, following U.S. EPA approval of the proposed temperature amendments and associated revisions to the receiving water temperature limits in the NPDES permit, would provide additional biological data to characterize the relative health of the aquatic community over time. The details of these surveys (i.e., exact timing, sites to be surveyed, etc.) will be determined through future meetings of District, Regional Board, and CDFG staff, following approval of the proposed temperature amendments by U.S. EPA.

### 8.1.2 Regional Board Surveillance and Inspection

Regional Board surveillance and inspection activities for Deer Creek, a seasonally effluent-dominated water body, would include those currently being conducted under the NPDES Program. These include, but are not limited to, the following activities:

- 1) inspections of the DCWWTP facilities, operations, and records;
- 2) inspections of the physical, chemical, and biological characteristics of Deer Creek upstream and downstream from the DCWWTP; and
- 3) review of discharger-submitted self monitoring reports.

In addition, the Regional Board will continue to conduct compliance monitoring to determine permit compliance and validate self-monitoring reports. Discharger compliance monitoring is the responsibility of the Regional Board staff.

Finally, Regional Board staff would conduct investigations of complaints, if any are made to the Regional Board. Complaints from public or governmental agencies to the Regional Board regarding the discharge of pollutants or creation of nuisance conditions would be investigated and pertinent information collected.

### 8.2 Use of Monitoring Data

Monitoring data collected would be used to: 1) determine whether the proposed site-specific water quality objectives for Deer Creek are being achieved; 2) characterize resultant instream conditions, both chemical and biological, under the site-specific water quality objectives; and 3) assess the relative health of Deer Creek's aquatic ecology in the ~~near-term and~~ future, and whether the frequency of opportunistic use of Deer Creek by anadromous salmonids changes, relative to existing conditions, due to Cosumnes River restoration activities.

These monitoring data will provide a technical basis from which to review the proposed site-specific temperature objectives for Deer Creek as part of the Regional Board's triennial review of the Basin Plan.

## 9.7 The No Project/Current Basin Plan Alternative

This Staff Report concludes that the Proposed Project will not cause any potentially significant impacts. Therefore, there are no mitigation measures or alternatives that could reduce or avoid significant impacts. Nevertheless, this report analyzes a No Project/Current Basin Plan Alternative to comply with the requirements for an EIR, and thus is not merely the equivalent of a Negative Declaration, thereby providing additional context for decision-making parties. The No Project/Current Basin Plan Alternative is not environmentally superior to the Proposed Project.

## References

EID (El Dorado Irrigation District). 1972. Deer Creek Basin Water Reclamation Project of El Dorado Irrigation District. Prepared for the State Water Resources Control Board, Division of Water Quality Control. April 17, 1972.

ESA (Environmental Science Associates). 1998. Deer Creek Wastewater Treatment Plant Expansion Project: Draft Environmental Impact Report. Prepared by ESA for the El Dorado Irrigation District. State Clearinghouse No. 96092074. July 15, 1998.

Figure X – Land use figure (Figure 7 in Staff Report)

Figure Y – soil type figure (Figure 8 in Staff Report)

Appendix G – Historic USGS flow data for Sloughouse and the Cosumnes River